



Illinois Department of Transportation

Memorandum

To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: October 15, 2015

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement October 16, 2015 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Thursday, October 29, 2015**. Applicants will not be accepted after that time and date.

NOTE: Applications will be accepted from qualified permanent DOT employees only. A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Halie Zulauf or Denise Hamilton at 217/782-5594.

CE VI Studies & Plans Engineer
Region 5/District 9/Program Development
Highways
Carbondale

Attachments
40553

Technical Applications (PM 1080) **must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) by **Thursday, October 29, 2015, 4:30 p.m.** Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Applications will be accepted from qualified permanent DOT employees only. A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer VI	Salary Range:	\$6,945 - \$11,020
Position Title:	Studies & Plans Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW116-23-59-303-00-01	IPR#:	40553

Office/Central Bureau/District/Work Address:

Division of Highways/Region 5/District 9/Program Development/2801 W Murphysboro Rd, Carbondale, IL

Description Of Duties:

This position is accountable for the completion of the studies and plans necessary for the district highway improvement programs. The incumbent directs the preparation of engineering design, geometric, hydraulic, and environmental studies as well as contract documents for highway improvements in accordance with departmental design policies, specifications, standards and sound engineering practice.

Special Qualifications:

The following criteria is required:

- Current IL Professional Engineer license
- Occasional districtwide travel and some statewide, which could include overnight stays
- Possible overtime during evenings and weekends

The following criteria is desired:

- Ten years of experience in civil engineering of which at least six years should be in the specific area of highway engineering, four years of which should include the planning and supervision of significant engineering work
- Extensive knowledge of the principles and practices of civil engineering with special emphasis in the areas of engineering design, geometric, hydraulic, and environmental studies
- Ability to develop and maintain cooperative relationships with departmental staff and the public
- Ability to interpret and enforce divisional and departmental policies
- Strong management skills
- Strong problem solving and decision-making skills

Shift/Remarks:

8:00 am – 4:30 pm / Monday – Friday

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	August, 2015	POSITION:	Studies & Plans Engineer
APPROVED BY:	<u>Carrie Nelson</u>	OFFICE/DIVISION:	Highways, District 9, Program Development
CODE:	PW116-23-59-303-00-01	REPORTS TO:	Program Development Engineer

Position Purpose

This position is accountable for the completion of the studies and plans necessary for the district highway improvement programs. The incumbent directs the preparation of engineering design, geometric, hydraulic, and environmental studies as well as contract documents for highway improvements in accordance with departmental design policies, specifications, standards and sound engineering practice.

Dimensions

Subordinate Staff:	4 – 7 Direct; 30-100 Indirect
Annual Program:	\$25 - \$300 Million
Number of Design Reports:	20-200 Annually

Nature and Scope

This position reports to the Program Development Engineer. Reporting directly to this position are Project Engineers, an Environmental Studies Unit Head, a Geometrics Engineer, a Bridge and Hydraulics Engineer, and a secretary.

This position functions within the framework of both short- and long-range transportation facility improvement programs which are based on sufficiency and needs studies. The incumbent must be able to coordinate engineering, sociology, environmental and economic factors which influence the design of transportation systems. The incumbent must have the ability to recognize the necessity to deviate from current procedures to resolve issues relative to a particular project without compromising the cost effectiveness of the project. The incumbent must effectively apply a wide range of federal and state procedures, policies and legislation to secure project approvals and prepare plans and contracts within the time scheduled for program implementation.

Typical problems include advancing viable alternatives to transportation deficiencies and presenting them in a coherent format for review by diverse groups of public and private agencies, organizations, and individuals. The incumbent must also plan and coordinate the activities necessary to complete plans and specifications accurately and completely, assuring uniformity and consistency in policy compliance and to determine the proper design and standards created by the different construction methods to be used. The greatest challenge is to coordinate activities to accomplish plan completion in an accurate and timely manner to meet predetermined and accelerated time tables.

The incumbent is accountable for directing the preparation of appropriate engineering studies of highway improvements to accomplish the Annual and Multi-Year Program. This position is responsible for determining the scope, location, design, cost and environmental impact of transportation improvements. Public hearings, as well as formal and informal meetings with the public, are directed by the incumbent to secure involvement and support for project proposals and design. He/she directs reviews of proper design applications of policies and procedures for projects prepared by consultants. This position ensures the timely completion of plans and

specifications so that projects can be placed under contract by predetermined time schedules. The incumbent motivates, develops and evaluates subordinate staff and ensures compliance with the Department's safety rules, practices, and procedures. The incumbent is also involved in making recommendations on promotions, salary adjustments, manpower and equipment and operating budget needs for the bureau.

The incumbent accomplishes accountabilities through the following technical staff:

Project Engineers – who supervise and coordinate activities in the development of all elements of location and design reports for highway improvements and the preparation of plans and specifications. These positions also review work prepared by consultants.

Bridge & Hydraulics Engineer - who prepares hydraulics reports, reviews consultants' reports for TS&L drawings and bridge plans, reviews hydraulics projects for permit requests, is involved with Bridge Condition Reports and repair plans, and supervises and coordinates activities in the development of all elements of location and design reports for highway improvements and the preparation of plans and specifications. This position also reviews work prepared by consultants.

Geometrics Engineer - who prepares interchange and intersection design studies, conducts alignment and access studies, develops capacity analysis, determines if traffic signals are warranted and advises other bureaus on geometric design, and supervises and coordinates activities in the development of all elements of location and design reports for highway improvements and the preparation of plans and specifications. This position also reviews work prepared by consultants.

Environmental Studies Unit Head - who prepares and/or reviews Environmental Impact Statements, Air and Noise Pollution Studies, and secures the necessary reviews, revisions and approvals.

Studies & Plans Engineer/Technician Squad Leaders, who supervise engineers and technicians engaged in designing the more difficult projects in the District, and reviews consulting engineer's plans and specifications.

Studies & Plans Engineers/Technicians, who design and prepare plans for highway facility improvements.

Secretary - who prepares and files correspondence and reports for the area, schedules appointments and meetings for various activities, maintains timekeeping records for all employees in the Section, and provides general secretarial support.

The incumbent has broad latitude to resolve problems arising within his/her area of responsibility. This position's day-to-day activities are governed by established federal, state, and departmental regulations, policies and procedures. Controversial matters requiring special considerations and/or deviation from standard policies are discussed with his/her supervisors. This position requires a current IL Professional Engineer License; occasional districtwide travel and some statewide, which could include overnight stays; and possible overtime during evenings and weekends.

Frequent contacts are made with all district bureaus, the Division of Highways' Central bureaus, the Division of Public Transportation and the Office of Planning and Programming. External contacts are with outside agencies such as state, federal and local groups and other public agencies. He/she discusses problems with the Federal Highway Administration pertaining to planning methodology, location investigations and environmental studies. He/she is responsible for answering questions received in written and verbal format from both private individuals and organizations.

The effectiveness of this position is measured by the incumbent's ability to effectively and efficiently manage the Studies and Plans Section by meeting production deadlines and by having plans accepted by the public,

local agencies, the Central Bureaus of Highways and the Federal Highway Administration without major corrections and revisions.

Principal Accountabilities

1. Coordinates studies to determine feasible corridors for new highway and/or determines most acceptable design for proposed and existing transportation facilities.
2. Synthesizes engineering, sociological and environmental factors which influence the design of transportation systems.
3. Directs reviews of proper design applications of policies and procedures for projects prepared by consultants.
4. Directs the timely completion of plans and specifications so that the project can be placed under contract by predetermined time schedules.
5. Directs, motivates and supervises personnel to accomplish the section's work program and goals within the scope of the District's financial resources and prescribed deadlines.
6. Provides administrative assistance in such matters as manpower assignments, equipment requests and budgetary matters to ensure efficient operations of the bureau.
7. Evaluates and trains personnel to ensure a well-developed, competent staff.
8. Performs other duties as assigned.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.